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CLAIM AMENDMENTS

WHAT IS CLAIMED IS:

This listing of the claims will replace all prior versions, and listing, of claims in the application:

1. (Currently Amended) ~~Contact~~ A contact mat ~~(9, 19)~~ for electrical contacting of an actuator, ~~especially of a piezo actuator for an injector of an Injection system, with~~ comprising:

- a number of electrically-conductive wires ~~(5, 23)~~ arranged next to one another, and

- a number of mechanical transversal connections between the individual wires ~~(5, 23)~~,

~~characterized in that~~ wherein

the transversal connections consist in each case of one terminal post ~~(3, 4, 20-22)~~ of the actuator.

2. (Currently Amended) ~~Contact~~ A contact mat ~~(9, 19)~~ in accordance with claim 1,

~~characterized in that~~ wherein

the terminal posts ~~(3, 4, 20-22)~~ ~~feature~~ comprise wire guides to mechanically guide the wires ~~(5, 23)~~.

3. (Currently Amended) ~~Contact~~ A contact mat ~~(9, 19)~~ in accordance with claim 2,

~~characterized in that~~ wherein

the wire guides consist of a flattening ~~(24)~~ of the terminal posts ~~(3, 4, 20-22)~~.

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4. (Currently Amended) ~~Contact~~ A contact mat ~~(9, 19)~~ in accordance with claim 2 ~~or 3~~,

~~characterized in that~~ wherein

the wire guides consist of nicks in the terminal posts ~~(3, 4, 20-22)~~, with the nicks running in the longitudinal direction of the wires ~~(5, 23)~~.

5. (Currently Amended) A contact mat in accordance with claim 1,

wherein ~~Contact mat (9, 19) in accordance with one of the previous claims,~~

~~characterized in that~~

the terminal posts ~~(3, 4, 20-22)~~ are essentially arranged equidistantly in the longitudinal direction of the wires ~~(5, 23)~~.

6. (Currently Amended) A contact mat in accordance with claim 1,

wherein ~~Contact mat (9, 19) in accordance with one of the previous claims,~~

~~characterized in that~~

the terminal posts ~~(3, 4, 20-22)~~ are arranged in the longitudinal direction of the wires ~~(5, 23)~~ at a distance which is greater than the length of the wires ~~(5, 23)~~ for a complete contacted actuator.

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7. (Currently Amended) A contact mat in accordance with claim 1,

~~wherein Contact mat (9, 19) in accordance with one of the previous claims,~~

~~characterized in that~~

the terminal posts ~~(3, 4, 20-22)~~ are connected to the wires ~~(5, 23)~~ by a solder connection.

8. (Currently Amended) A contact mat in accordance with claim 1,

~~wherein Contact mat (9, 19) in accordance with one of the previous claims,~~

~~characterized in that~~

the individual wires ~~(5, 23)~~ between the terminal posts ~~(3, 4, 20-22)~~ are connected to each other by a flexible material ~~(8)~~.

9. (Currently Amended) A contact mat in accordance with claim 8,

~~wherein Contacting in accordance with claim 8,~~  
~~characterized in that~~

the flexible material ~~(8)~~ is elastic and/or vibration-damping.

10. (Currently Amended) A contact mat in accordance with claim 8,

~~wherein Contacting in accordance with claim 8 or 9,~~  
~~characterized in that~~

the individual wires ~~(5, 23)~~ are encapsulated in the flexible material ~~(8)~~.

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11. (Currently Amended) A contact mat in accordance with claim 1,

~~wherein contacting in accordance with one of the previous claims, characterized in that,~~

the individual wires ~~(5, 23)~~ are molded within or extrusion coated with the flexible material ~~(8)~~.

12. (Currently Amended ) An A~~actuator, especially piezo actuator for an injector of an injection system,~~ with a contact mat ~~(9, 19)~~ in accordance with one ~~of the previous claims~~claim 1, for electrical connection of a piezo stack ~~(18)~~ with two terminal posts ~~(3, 4, 20-22)~~.

13. (Currently Amended) ~~Injector~~ An injector for an injection system with an actuator in accordance with claim 12.

14. (Currently Amended) ~~Production~~ A production method for a contact mat ~~(9, 19)~~ for electrical contacting of an actuator, ~~with~~ comprising the following steps of:

- Arrangement of a number of electrically-conductive wires ~~(5, 23)~~ next to each other,
- Mechanical connection of individual wires ~~(5, 23)~~ to each other by a number of transversal connections, ~~characterized in that~~wherein

the transversal connections consist in each case of one terminal post ~~(3, 4, 20-22)~~ of the actuator.

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15. (Currently Amended) ~~Production~~ A production method  
in accordance with claim 14,

~~characterized in that~~ wherein

the terminal posts ~~(3, 4, 20-22)~~ are connected to the  
wires ~~(5, 23)~~ by a solder connection.

16. (Currently Amended) ~~Production~~ A production method  
in accordance with claim 14 ~~or 15~~,

~~characterized in that~~ wherein

the wires ~~(5, 23)~~ are unwound from one or more feed rolls  
~~(10, 11)~~, to arrange the wires ~~(5, 23)~~ next to one another.

17. (Currently Amended) A production method in  
accordance with claim 14, comprising

~~Production method in accordance with one of the claims 14  
to 16,~~

~~characterized by~~

the following steps:

- Attaching the wires ~~(5, 23)~~ of a first contact mat  
~~(9, 19)~~ to a first contact strip ~~(2)~~ of an actuator,
- Separating the wires ~~(5, 23)~~ of the first contact  
mat ~~(9, 19)~~ between the two terminal posts ~~(3, 4, 20-22)~~ which  
are closest to the actuator,
- Attaching the wires ~~(5, 23)~~ of a second contact mat  
~~(9, 19)~~ to a second contact strip of the same actuator,
- Separating the wires ~~(5, 23)~~ of the second contact  
mat ~~(9, 19)~~ between the two terminal posts ~~(3, 4, 20-22)~~ which  
are closest to the actuator.

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18. (Currently Amended) A production method in accordance with claim 14,

wherein

~~Production method in accordance with one of the claims 14 to 17,~~

~~characterized in that~~

the wires ~~(5, 23)~~ of the contact mat ~~(9, 19)~~ between the terminal posts ~~(3, 4, 20-22)~~ are connected to one another by a flexible material ~~(8)~~.

19. (Currently Amended) A production method in accordance with claim 18,

wherein

~~Production method in accordance with claim 18,~~

~~characterized in that~~

the flexible material ~~(8)~~ is elastic and/or vibration-damping.

20. (Currently Amended) A production method in accordance with claim 18,

wherein

~~Production method in accordance with claim 18 or 19,~~

~~characterized in that~~

the individual wires ~~(5, 23)~~ are encapsulated with the flexible material ~~(8)~~.

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21. (Currently Amended) A production method in accordance with claim 18,

wherein

~~Production method in accordance with one of the claims 18 to 20,~~

~~characterized in that~~

the individual wires ~~(5, 23)~~ are molded within or injection coated with the flexible material ~~(8)~~.

22. (Currently Amended) A production method in accordance with claim 18,

wherein

~~Production method in accordance with one of the claims 18 to 21,~~

~~characterized in that~~

the individual wires ~~(5, 23)~~ are interconnected by the wires ~~(5, 23)~~ being immersed in the flexible material ~~(8)~~ with the flexible material coating the wires ~~(5, 23)~~ and forming connection bridges between the wires ~~(5, 23)~~.

23. (Currently Amended) A production method in accordance with claim 22,

wherein

~~Production method in accordance with claim 22,~~

~~characterized in that~~

the wires ~~(5, 23)~~ are immersed in the liquid flexible material ~~(8)~~ before the wires ~~(5, 23)~~ are connected to the actuator body and the associated terminal posts ~~(3, 4, 20-22)~~.

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24. (Currently Amended) A production method in accordance with claim 23,

wherein

~~Production method in accordance with claim 23,~~

~~characterized in that~~

the wires ~~(5, 23)~~ together with the actuator body and the terminal posts ~~(3, 4, 20-22)~~ are immersed in the liquid material after the wires ~~(5, 23)~~ have been connected to the actuator body and the associated terminal posts ~~(3, 4, 20-22)~~.

25. (Currently Amended) A production method in accordance with claim 17,

wherein

~~Production method in accordance with one of the claims 17 to 24,~~

~~characterized in that~~

the actuator body with the associated terminal posts ~~(3, 4, 20-22)~~ and the contact mat ~~(9, 19)~~ are encapsulated with an encapsulant.